



Canadian Space
Agency

Agence spatiale
canadienne



Government Related Initiatives Program (GRIP)

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**Inter-Agency Workshop among the NPS, Parks
Canada, NASA, CSA and CCRS**

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Canada 

1. PROGRAM DESCRIPTION

1.1 BACKGROUND

- Established in 2000.
- Enhanced in 2002: became a driver for government EO implementation.
- GRIP develops applications of EO derived information that have a strong **potential to increase the value of government services.**



1.2 MISSION

GRIP fosters the use of Canada's space resources by **Canadian federal government departments**.

The program focuses on developing government use of **Earth-ocean-atmosphere Observation (EO)** systems and services.



1.3 OBJECTIVE

Canadian government departments will make optimal use of Earth Observation technologies so that Canadians derive maximum benefit from **EO investment by Canada and the international community.**



1.4 SUB-OBJECTIVES (1/2)

1. **Raise awareness** of the uses and benefits of space-borne EO and related enabling technologies.
2. Support the **development and demonstration** of new applications that increase the benefits and effectiveness of government services for Canadians.



1.4 SUB-OBJECTIVES (2/2)

3. Achieve efficient use through **interdepartmental coordination** of Canada's investment in EO for understanding, monitoring, and predicting the state of our environment; resource management; and surveillance of our territory
4. Encourage use of Canadian EO solutions in support of our **international** commitments regarding environmental monitoring and as part of Canada's assistance to developing nations.



1.7 GRIP FEDERAL PARTNERS

Environment Canada

- ❑ Meteorological Service of Canada
 - ❑ Canadian Ice Service
- ❑ Environmental Conservation Service
 - ❑ Canadian Wildlife Service
 - ❑ National Water Research Institute
- ❑ Environmental Protection Service
 - ❑ Greenhouse Gas Division

Natural Resources Canada

- ❑ Canadian Forest Service
- ❑ Earth Sciences Sector
 - ❑ Geological Survey of Canada
 - ❑ Geomatics Canada
 - ❑ Canada Centre for Remote Sensing
 - ❑ Centre for Topographic Information

Parks Canada

- ❑ Fisheries and Oceans Canada
 - ❑ Canadian Coast Guard

Statistics Canada

National Defence

Agriculture and Agri-Food Canada

Projects portfolio (1/4)

Comments on portfolio :

- Majority of the 25 projects ongoing are three-year projects currently in their second year.
- Since projects started, inter-governmental collaboration has increased.
- Average project value: \$ 260K. Future: fewer projects with more funding and better coordination among OGDs.
- 5 projects focus on applications for RADARSAT-2 advanced modes.



Projects portfolio (2/4)

GRIP Funding by OGD

LEAD DEPT'S	FY 04/05 (\$K)				
	GRIP	Lead Dept	Partners	Total	GRIP portion
AAFC	434	593	251	1 278	34%
DFO	730	1 532	155	2 417	30%
DND	175	650	0	825	21%
EC	1 977	2 861	2 596	7 434	27%
NRCan	2 945	3 603	2 389	8 937	33%
Parks Canada	250	145	208	603	41%



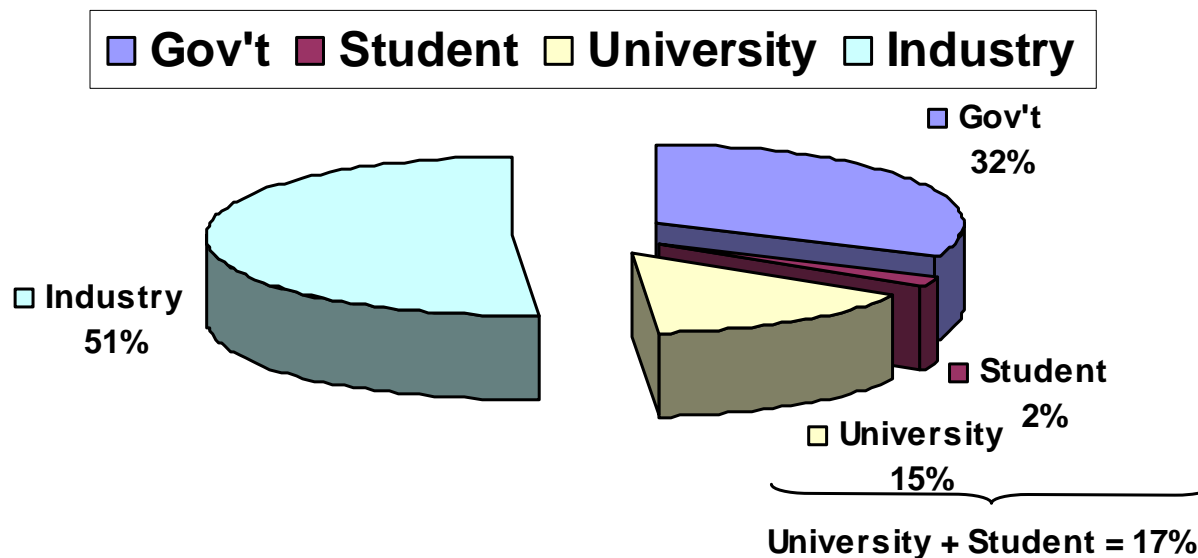
Projects portfolio (3/4)

Government of Canada partners in the CSP through GRIP co-investment in EO projects that serve their needs

	00/01	01/02	02/03	03/04	04/05
Agriculture and Agri-Food Canada		*	*	*	*
Department of National Defence					*
Environment Canada					
Canadian Wildlife Service			*	*	*
National Water Research Institute				*	*
Greenhouse Gas Division					*
Canadian Ice Service			*	*	*
Climate Processes and EO Research	*	*	*	*	*
Data Assimilation and Satellite Meteorology				*	*
Fisheries and Oceans Canada					
Ocean Science	*	*	*	*	*
Canadian Coast Guard					*
Natural Resources Canada					
Canadian Forest Service	*	*	*	*	*
Earth Sciences Sector - Geological Survey of Canada			*	*	*
Canada Centre for Remote Sensing		*	*	*	*
Centre for Topographic Information			*	*	*
Parks Canada Agency				*	*

Projects portfolio (4/4)

Average Use of GRIP Funds, FY 2002/03





Projects themes (Correspond to themes identified in EO strategy):

- 1) Mapping and inventory for resource management**
- 2) Environmental monitoring, science, prediction**
- 3) Security, safety, and law enforcement**



1) Mapping and Inventory

10 projects:

- Agricultural land use, management practices and soils (4)
- Forests (2)
- Wetlands
- Topography
- Northern Land Cover
- Land Cover Change

Total GRIP investment in FY 04/05: \$2.8 M



2) Environmental Monitoring, Science, Prediction

11 projects:

- Cryosphere
- Climate change
- Inland waters
- Ocean ecosystem
- Atmospheric & oceanographic forecasting
- Wildland fires
- Ecosystem integrity in national parks
- Groundwater
- Land ice
- Coastal erosion
- Cloudsat

Total GRIP investment in FY 04/05 : \$2.9 M



3) Security, Safety, and Law Enforcement

4 projects:

- Advanced SAR in ice and marine operations
- Integrated satellite tracking of polluters - ISTOP
- Wide area surveillance and support capability
- Search and rescue operations

Total GRIP investment in FY 04/05 : 0.8 M

CONCLUSION

GRIP:

GRIP is a model program fulfilling CSA mission and enabling Canadian government departments to make optimal use of EO technologies so that Canadians derive maximum benefits from EO investment by Canada and the international community.